ARTICLE 7

Water Utilities

Subarticle 1

General

103-700. Authorization of Rules.

A. Section 58-5-210 of the Code of Laws of South Carolina 1976, provides: "That the Public Service Commission is hereby, to the extent granted, vested with power and jurisdiction to supervise and regulate the rates and service of every public utility in this State, together with the power, after hearing, to ascertain and fix such just and reasonable standards, classifications, regulations, practices, and measurements of service to be furnished, imposed, observed and followed by every public utility in this State, and the State hereby asserts its rights to regulate the rates and services of every public utility as herein defined. In accordance with the above provisions the Public Service Commission has adopted the following rules and regulations and fixed the following standards to govern water service by public utilities. All previous rules or standards are hereby revoked, annulled, and superseded."

B. The adoption of these rules shall in no way preclude the Public Service Commission from altering, amending, or revoking them in whole or in part, or from requiring any other or additional service, equipment, facility, or standard, either upon complaint, upon the application of any utility or upon its own motion. Furthermore, these rules shall not relieve either the commission or the utilities of any duties prescribed under the laws of this State.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-701. Application of Rules.

- 1. Jurisdiction. These rules shall apply to any person, firm, partnership, association, establishment or corporation (except public utilities owned or operated by any municipality or agency thereof and/or any water authority specifically exempted by statute) which is now or may hereafter become engaged as a public utility in the business of furnishing water to any water consumer within the State of South Carolina.
- 2. Purpose. These rules are intended to define good practice. They are intended to insure adequate and reasonable service. The utilities shall assist the commission and the ORS in the implementation of these rules and regulations.
- 3. Waiver of Rules. In any case where compliance with any of these rules and regulations introduces unusual difficulty or where circumstances indicate that a waiver of one or more rules or regulations is otherwise appropriate, such rules or regulations may be waived by the commission upon a finding by the commission that such waiver is in not contrary to the public interest.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-702. Definitions.

The following words and terms, when used in these rules and regulations, shall have the meaning indicated below:

103-702.1. Commission.

The Public Service Commission of South Carolina.

103-702.2. Curb Stop.

Valve controlling water flow located on the utility service line. Curb stops are for the exclusive use of the utility for control of the water supply to individual customers and should be located at or adjacent to the customer's property line but should not be located on the customer's premises. The control of the water supply by the customer shall be by means of a separate valve, installed by the customer, and located on his premises.

103-702.3. Customer.

Any person, firm, partnership or corporation, or any agency of the Federal, State or Local Government, being supplied with service by a utility under the jurisdiction of this commission. Customers shall be classified for purposes of applying rates as "residential", or "commercial", or "industrial".

103-702.4. Customer Contribution in Aid of Construction.

A fee paid by a customer under a contract entered into by and between the utility and its customers providing terms for the extension of the utility's mains to serve the customer.

103-702.5. Customer Service Line.

The portion of the distribution line that transports water from the meter, to the place of consumption on the customer's premises, or, if there is no meter, from the curb stop to the place of consumption on the customer's premises.

103-702.6. Error in Registration.

The percentage by which the correct registration varies from the meter registration. The error is derived by stopping the meter test hand at the starting point and then determining the percentage variation in registration as indicated by the working standard. The formula for determining the error in registration is:

	100	X	(Meter Reading-Actual Volume)	
			(Actual Volume)	

A positive percentage indicates a fast meter and a negative percentage indicates the meter is slow.

103-702.7. Homeowners Association.

An association of lot owners located in a particular subdivision or development incorporated under the laws of this state as a non-profit corporation, including as one of its purposes, the operation of a water system to serve the particular subdivision or development. Each homeowners association, prior to the commencement of operations of a water system, shall file with the commission and provide a copy to the ORS (a) a certified copy of its certificate of incorporation; (b) a copy of the corporation's bylaws; (c) a copy of any declaration of covenants, conditions and restrictions on real property in the subdivision or development filed in conjunction with the formation of the homeowners association; (d) a copy of the permit or authorization from the Department of Health and Environmental Control issued to the homeowners association to operate the utility; and (e) copies of a statement signed by each lot owner disclosing that the water services in the subdivision are provided by a non-profit homeowners association, in which each lot owner is a voting member, and that an appropriate assessment to meet operating expenses of the utility must be paid by each lot owner.

103-702.8. Main.

A water pipe owned, operated or maintained, by a utility, which is used for the purpose of transmission or distribution of water, but does not include the "utility service line" or "customer service line".

103-702.9. Meter.

Any device, or instrument, which is used by a utility in measuring a quantity of water for billing purposes. The meter will be the property of, and will be maintained by, the utility.

103-702.10. The Office of Regulatory Staff.

The executive director and employees of the Office of Regulatory Staff.

103-702.11. Premises.

A piece or tract of land or real estate, including buildings and other appurtenances thereon.

103-702.12. Rate.

The term "rate" when used in these rules and regulations means and includes every compensation, charge, toll, rental, classification, or availability fee, or any of them, including tap fees, or other non-recurring charges demanded, observed, charged, or collected by any utility for any water service offered by it to the public, and any rules and regulations, practices, or contracts affecting any such compensation, charge, toll, rental or classification. An application for approval of any rate schedule will not be accepted for filing under S.C. Code Ann., Section 58-5-240 unless accompanied by the information specified under 103-712(4).

103-702.13. Tap Fee.

A non-recurring, non-refundable charge related to connecting the customer to the utility's system which includes the cost of installing the utility's service line from the main to the customer's premises and a portion of plant capacity which will be used to provide service to the new customer. Plant capacity shall be computed by using the Guidelines for Unit Contributory Loadings to Wastewater Treatment Facilities (1972) to determine the single family equivalency rating. Any privately-owned corporation, firm, partnership, or individual empowered by contract, or otherwise, to collect a tap fee from a customer for the provision of water service to that customer shall be considered a utility, and shall obtain commission approval prior to collecting tap fees, or any other rates for water service. An application for approval of any rate change shall not be considered unless the filing contains appropriate exhibits setting forth all cost

criteria justifying the tap fee, setting forth the portion of the tap fee related to installing the service line and the portion related to plant capacity.

103-702.14. Utility.

Every person, firm, partnership, association, establishment or corporation furnishing or supplying in any manner water to the public, or any portion thereof, for compensation. A "homeowners association", as defined in these rules and regulations and subject to the requirements set forth herein, upon commission order, may be found not to be a utility.

103-702.15. Utility Service Line.

The portion of the distribution line that transports water from a main to a meter, or if there is no meter, up to and including the curb stop.

103-702.16. Water Plant.

All facilities owned by the utility for the collection, production, purification, storage, transmission, metering, and distribution of potable water.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-703. Authorization for Rates and Charges.

A. No schedule of rates, contracts, or rules and regulations, shall be changed until after the proposed change has been approved by the commission.

B. All rates, contract forms, or rules and regulations, proposed to be put into effect by any utility as defined in 103-702(14), shall be first approved by this commission before they shall become effective, unless they are exempt from such approval by statute or other provision of law.

C. No rate, contract, or rules and regulations of any utility under the jurisdiction of this commission shall be deemed approved or consented to by the mere filing of a schedule, or other evidence thereof, in the offices of the commission.

D. Each customer within a given classification (i.e., residential, commercial or industrial) shall be charged the same approved rate, including tap fees, as every other customer within that classification unless reasonable justification is shown for the use of a different rate or toll, and a contract or tariff setting forth the different rate has been filed and approved by the commission through the issuance of an order or directive.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-704. Territory and Certificates.

No existing public utility supplying water to the public, or any individual, corporation, partnership, association, establishment or firm undertaking the construction or acquisition of a utility, shall hereafter sell, acquire, transfer, begin the construction or operation of any utility system, or of any extension thereof, by the sale of stock or otherwise, without first obtaining from the commission a certificate that the sale, transfer or acquisition is in the public interest, or that public convenience and necessity require or will require construction or operation of any utility system, or extension. Such certificate shall be granted only after the applicable information set forth in Subarticle 2, 103-710 et seq., has been filed with the commission and provided to the ORS, and after notice has been given to the Department of Health and Environmental Control and other interested water utilities, and to the public, and after due hearing; provided, however, that this regulation shall not be construed to require any existing water utility to secure a certificate for an extension within or to territory already served by it, necessary in the ordinary course of its business. But, if any water utility in constructing or extending its lines, plant or system unreasonably interferes, or is about to unreasonably interfere, with the service or system of any other utility, the commission may make such order, and prescribe such terms and conditions, in harmony with this regulation, as are just and reasonable.

HISTORY: Amended by State Register Volume 24, Issue No. 5, eff May 26, 2000; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-705. Utilities Rules and Regulations.

Each utility shall adopt rules, regulations, operation procedure policies, terms and conditions, etc., as may be necessary in the operation of the utility. Such service "conditions or regulations" shall be approved by and filed with the commission, along with certification that these rules are consistent with the rules of the commission and provided to the ORS.

HISTORY: Amended by State Register Volume 10, Issue No. 6, eff June 27, 1986; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-706. Security Issues.

A. No utility shall issue any securities without the approval of the commission. This rule shall not apply to any issue of securities payable within one year from the date of issue, except in case of subsequent issues made to refund short term obligations; but such short term obligations may be renewed by similar obligations without the approval of the commission for an aggregate period not exceeding two years.

B. Any utility desiring to issue securities may apply to the commission for approval of the proposed issue by filing an application with the commission and serving a copy on the ORS, together with a statement verified by (1) its president and secretary or other appropriate officers; (2) two of its incorporators, or (3) by its owner or owners, if it is unincorporated, setting forth:

- (a) The amount and character of securities proposed to be issued;
- (b) The purpose for which they are to be issued;
- (c) The consideration for which they are to be issued;

- (d) The description and estimated value of the property, if any, to be acquired through the proposed issue;
 - (e) The terms and conditions of the issuance; and
 - (f) The financial condition of the utility and its operations so far as relevant.
- C. The commission shall determine whether the purpose of the issue is proper; shall value the property or services, if any, to be acquired by the issue, and it shall find and determine the amount of securities reasonably necessary for the purpose for which they are to be issued. This determination shall follow such investigation as may be necessary, wherein the utility and any other interested party shall be entitled to be heard.
- D. To the extent that the commission may approve the proposed issue, it shall grant to the utility a certificate of authority stating the character of the securities and the amount reasonably necessary for the purpose for which they are to be issued; and the value of any property or services, if any, to be acquired. This certification shall not impose or imply any guaranty or obligation as to such securities on the part of the commission.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

Subarticle 2

Records and Reports

103-710. Location of Records and Reports.

All records required by these rules are necessary for the administration thereof, shall be kept within an office located be available for inspection in this state, unless otherwise specifically authorized by the commission. These records shall be available for examination by the ORS or its authorized representatives at all reasonable hours.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-711. Retention of Records.

Unless otherwise specified by the commission, or by regulations or commission Orders governing specific activities, all records required by these rules shall be preserved according to the most current edition of Regulations to Govern the Preservation of Records for Electric, Gas and Water Utilities, published by the National Association of Regulatory Utility Commissioners (NARUC). Following are certain modifications to those record retention periods:

(A) Item 30. Plant ledgers:

a. Ledgers of utility plant accounts including land and other detailed ledgers showing the cost of utility plant by class for the life of the utility.

- b. Continuing plant inventory ledger, book or card records showing description, location, quantities, cost, etc. of physical units (or items) of utility plant owned life of the utility.
 - (B) Item 32. Retirement work in progress ledgers, work orders and supplemental records:
- a. Work order sheets to which are posted the entries for removal costs, materials recovered and credits to utility plant accounts for cost of plant retired life of the utility.
- (C) Other Records related to a test year used in a rate adjustment proceeding shall be preserved for a period of two years after the final order in such case or throughout the period that the Order by the Public Service Commission concerning the rate adjustment may be appealed, whichever is later. The utility shall maintain beyond this two-year period sufficient records to verify and substantiate all requirements included in these rules.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-712. Data to be Filed with the Commission and Provided to the ORS.

1. Annual Report. Each utility operating in the State shall file an annual report with the commission and provide a copy to the ORS giving accounting, and other information as the commission directs.

The commission or the ORS will provide an annual report form upon request. If the utility's books are maintained on a calendar year, the annual report must be filed on or before April 1st of each year. If the utility uses a fiscal year other than December 31st, the annual report should be filed within three months after the end of the fiscal year.

- 2. Current Information and Documents. The utility shall file with the commission and provide a copy to the ORS the following documents and information, and shall maintain such documents and information in a current status.
- 2.1. Tariff. A copy of each schedule of rates and charges for service, together with the applicable riders, including any rules and regulations or terms and conditions describing policies and practices in rendering service shall be provided to the commission and the ORS.
- 2.2. Contract Forms. A copy of each special contract for service, including aid to construction agreements, and rate or toll agreements shall be provided to the commission and the ORS.
- 2.3. Customer Bill. A copy of each type of customer bill form, which shall include the information which is normally shown on a customer's bill for service shall be provided to the ORS.
- 2.4. Operating Area Maps. A map of the utility's operating area. This map shall be revised annually and provided to the ORS unless such revision is unnecessary, in which event the utility shall notify the ORS that the map on file is current. The map should show:
 - (a) Location of pumping stations, purification plants and sources of supply;
 - (b) Potable water storage facilities;
 - (c) Mains by size;

- (d) Location of valves and fire hydrants;
- (e) Service area clearly drawn on operating area map utilizing proper surveying standards;
- (f) Names of all communities (post offices) served;
- (g) Location of blow off valves;
- (h) Capacity of the system and;
- (i) Location of cross-connection control devices
- 2.5. Authorized Utility Representative. The utility shall advise the commission and ORS of the name, title, address, <u>email addresses</u>, and telephone number of the person who should be contacted in connection with:
 - (a) General management duties;
 - (b) Customer relations (complaints);
 - (c) Engineering operations;
 - (d) Meter test and repairs; and,
 - (e) Emergencies during non-office hours.
- 3. Performance Bond. Prior to operating, maintaining, acquiring, expanding or improving any water utility system, for which commission approval is required, the utility shall have on file with the commission and provide a copy to the ORS a performance bond with sufficient surety using a format prescribed by the commission.
- 3.1. Amount of Bond. The amount of bond shall be based on, but not limited to, the total amount of the following categories of expenses for twelve months: Operation and Maintenance Expenses, General and Administrative Expenses, Taxes Other Than Income Taxes, Income Taxes, and Debt Service including Interest Expenses. The minimum amount of the bond shall be \$100,000 and the maximum amount of the bond shall be \$350,000 based on the verified expenses of the utility for the preceding twelve-month period. A bond shall be required for each water and wastewater provider under the jurisdiction of the Public Service Commission. A certification that the face amount of the bond on file with the commission complies with the provisions of 103-712.3.1 shall be filed with the annual report required by 103-712.1 of this rule. The ORS shall review the annual reports and certifications and determine whether the present bond of the utility accurately reflects the expenses of the utility. Based upon the expenses of the utility as submitted in the annual report and as reviewed and adjusted by the ORS, the ORS shall make recommendations for increasing or reducing the amount of the bond within the minimum and maximum limits as prescribed by statute.
- 3.2. Sureties. Sufficient surety may be any duly licensed bonding or insurance company authorized to do business in this state. A corporate surety, other than such a bonding or insurance company, shall not be considered sufficient surety.

Sufficient surety may be any individual, as stockholder, partner, sole owner, etc., in the utility, so long as the individual surety's net worth is at least twice the face amount of the performance bond.

3.3. Financial statement. Upon order of the commission, when any individual acts as surety, he shall file with the commission and provide a copy to the ORS annually a financial statement verified by said surety showing the individual surety's personal assets, liabilities and net worth. The commission may accept a verification of the financial statement in a format prescribed by the commission, including third-party verification.

4. Rate Applications

- A. When any utility makes application for an increase in existing rates and charges, such application shall not be accepted for filing unless it contains the following information:
 - 1) A statement of reason justifying need for proposed rate adjustment;
 - 2) Most current available income and expense statement for the preceding twelve months;
 - 3) Proposed rate schedule;
 - 4) Test year proposed to be used;
 - 5) Pro forma income and expense statement using proposed rates applied to proposed test year;
 - 6) Balance sheet;
 - 7) Depreciation schedule by categories of plant or average service lives;
 - 8) Number of present and expected customers in the following twelve months;
- 9) Cost justification for proposed rates and charges, including tap fees; with attached schedules depicting labor costs, materials costs, and miscellaneous costs.
 - 10) Filing or updating performance bond in accordance with 103-712.3.
 - 11) Current or updated service area map;
 - 12) Statement of total plant investment by categories; and,
- 13) Most recent letter of approval from the Department of Health and Environmental Control, dated not more than six (6) months prior to date of application; and
 - 14) Customer bill form;
 - 15) Annual Report on file and evidence of last period Gross Receipts paid; and
 - 16) Any other pertinent or relevant information determined necessary by the commission.
- B. When any utility makes application for establishment of service area and rates and charges, such application shall contain the following information:

- 1) Copy of articles of incorporation or partnership agreement;
- 2) Plat of proposed area to be served;
- 3) Copy of engineering plans and specifications designed or certified to be in accordance with good engineering practices by a professional engineer registered in South Carolina;
- 4) Construction permit from the Department of Health and Environmental Control approving engineering plans and specifications;
- 5) Schedule of proposed rates and charges and cost justifications, including tap fees with attached schedules depicting labor costs, materials costs, and miscellaneous costs;
 - 6) Number of customers proposed to be served and capacity of system;
 - 7) Financial statement showing proposed plant investment by categories;
 - 8) Depreciation schedule by categories of plant or average service lives;
- 9) Pro forma income and expense statement showing the effect of using the proposed rates based on plant capacity;
 - 10) Filing of performance bond in accordance with 103-712.3.
- —11) Statement by a professional engineer that the system was built and installed according to plans and specifications on file with the commission and will furnish adequate service for the area to be served;
- 12) Letter from Department of Health and Environmental Control approving system for operation, dated not more than six (6) months prior to date of application;
 - 13) Customer bill form; and
 - 14) Other pertinent or relevant information determined necessary by the commission.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 27, Issue No. 2, eff February 28, 2003; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-713. Inspection of Plant and Equipment.

A. Each utility shall, upon request of the ORS, provide to the ORS a statement regarding the condition and adequacy of its plant, equipment, facilities, and service in such form as the commission may require or as the ORS may request.

B. Each utility shall keep sufficient records to give evidence of compliance with its inspection program as set forth in Subarticle 6, 103-760 et seq.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-714. Interruption of Service.

A. Each utility shall keep a record of any condition resulting in any interruption of service affecting its entire system or major division thereof, or any single community or an important division of a community, including a statement of the time, duration, and cause of any such interruption. The commission and the ORS should be notified of any interruption lasting more than six hours as soon as it comes to the attention of the utility and a complete report will be made after restoration of service.

B. Each utility shall make all reasonable efforts to prevent interruptions of service and, when such interruptions occur, shall endeavor to re-establish service with the shortest possible delay consistent with the safety of its consumers and the general public. Scheduled interruptions shall always be preceded by adequate notice to all affected customers, and will be made at a time that will not cause unreasonable inconvenience to customers.

C. All Water Utilities under the jurisdiction of the commission shall file with the commission and the ORS in writing a notice of any violation of a PSC regulation or a DHEC regulation which results in the issuance of a DHEC order. If the report includes information regarding a DHEC violation which results in the issuance of a DHEC order, the filer shall note if the DHEC order is under appeal and shall inform the commission of the resolution of the appeal. This notice shall be filed within twenty-four hours of the time of the inception of the violation or of the utility's receipt of the issuance of a DHEC order and shall detail the steps to be taken to correct the violation, if the violation is not corrected at the time of occurrence. The Company shall notify the commission and the ORS in writing within fourteen calendar days after the violation has been corrected.

D. All Water Utilities under the jurisdiction of the commission shall provide the ORS Consumer Services Division a copy of all advisories affecting ten or more customers within twenty-four hours of issuance. The utility shall notify the ORS Consumer Services Division in writing when the advisory has been lifted.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007; State Register Volume 33, Issue No. 6, eff June 26, 2009.

103-715. Accidents.

Each utility shall, as soon as possible, report to the ORS each accident happening in connection with the operation of its property, facilities, or service, wherein any person shall have been killed or seriously injured or whereby any serious property damage shall have been caused. Such first report shall later be supplemented by as full a statement provided to the ORS as is possible of the cause and details of the accident and the precautions, if any, which have been taken to prevent similar accidents.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-716. Complaints.

Complaints by customers concerning the charges, practices, facilities, or services of the utility shall be investigated promptly and thoroughly. Each utility shall keep a record of all such complaints received,

which record shall show the name and address of the complainant, the date and character of the complaint, and the adjustment or disposal made thereof.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990.

103-717. Meter History Records.

Each utility shall maintain records of the following data, where applicable, for each meter until retirement:

- A. The complete identification-manufacturer, number, type, size, capacity, multiplier, and constants.
- B. The dates of installation and removal from service together with the locations.

103-718. Meter Test Records and Reports.

Each utility shall maintain records of at least the last two tests made of any meter. The records of the meter test made at the time of the meter's retirement shall be maintained for a minimum of three years. Test records shall include the following:

- 1) The date and reason for the test;
- 2) The reading of the meter before making any test;
- 3) The accuracy "as found" at each rate of flow;
- 4) The accuracy "as left" at each rate of flow; and,
- 5) In the event tests of the meter are made by using a standard meter the utility shall retain all data taken at the time of the test in sufficiently complete form to permit the convenient checking of the test methods and calculations.

103-719. Accounting Procedures.

All books and records of the utility shall be maintained in accordance with the NARUC Uniform System of Accounts for Class A, B and C Water Utilities to the extent applicable, and such records must be made available for examination by the ORS or its authorized representatives at all reasonable hours. Full cooperation will be provided by the utility during rate adjustment audits or compliance audits conducted by the ORS or its representatives.

HISTORY: Amended by State Register Volume 10, Issue No. 6, eff June 27, 1986; State Register Volume 31, Issue No. 5, eff May 25, 2007.

Subarticle 3

Meters

103-720. Meter Requirements.

Service shall be measured by meters furnished by the utility, unless otherwise ordered by the commission and such meters shall maintain the degree of accuracy as set forth in 103-722.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-721. Meter Readings.

Each water meter shall indicate clearly the unit of water registered by such meter. Where the quantity of water is determined by calculation from recording devices, the utility shall supply the consumer with such information as will make clear the method by which the quantity is determined.

- 1. Meter Reading Sheets or Cards. The meter reading sheets or cards shall show:
 - (a) Customer's name, address and rate classification;
 - (b) Identifying number and/or description of the meter(s);
 - (c) Meter readings;
 - (d) Multiplier, if any; and,
 - (e) If the reading has been estimated.

103-722. Meter Accuracy and Condition.

A. Installation Test—Every water meter, whether new or repaired, shall be in good order and shall be correct to within three (3) per cent. However, a utility which has less than one thousand customers and which has no facilities for opening meter cases and adjusting the mechanism, may put a meter back into service if it is not found to be in error by more than three and one-half (3 1/2) per cent and appears otherwise to be in good order.

B. Method of Testing—All tests to determine the accuracy of registration of any water service meter shall be made with a suitable meter prover, and records of all regular or complaint tests shall be kept by the utility.

No meter shall be installed which is mechanically defective. The capacity of the meter and the index mechanism should be consistent with the water requirements of the customer.

103-723. Meter Seal.

Immediately after the pre-installation test or field test of a water meter the utility shall affix a seal in such a manner that the meter cannot be tampered with without breaking the seal.

103-724. Meter Location.

A. All meters will be furnished, installed, owned, and maintained by the utility, and shall remain its property and be accessible to and subject to its control. Meters shall be located in accordance with good

utility practices on the delivery side of the curb stop so as to control the entire water supply furnished to the premises. No meter shall be installed in any location on or off the premises where it may be unreasonably exposed to heat or cold or other cause of damage, or in an inaccessible or hazardous location.

B. Where water is furnished to the customer in accordance with a flat rate, the utility may install and maintain a meter located in accordance with good utility practices. After all customers in the utility's service area have been metered, the utility may make application to the commission and provide a copy to the ORS to obtain approval to change from a flat rate to a metered rate. Upon such application, the ORS will conduct an investigation to determine if a utility should utilize meters and, after hearing, the commission may order the use of metered rates. If no meters are in place, the commission after hearing, may order the installation of meters and the implementation of a metered rate.

C. The utility shall make available to the customer sketches of standard meter installations to demonstrate the way in which the customer's portion of the installation should be made.

D. In the event the customer desires any change in the location or position of the meter, meter box or vault, after they have been installed, such change in location shall be made by the utility at the expense of the customer.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-725. Change in Character of Service.

In order that the utility may provide a proper service facility and metering installation the customer shall advise the utility of the expected service requirements sufficiently in advance of the date service is required, and shall also advise the utility of any significant increase or decrease in service needs in sufficient time to change service facilities.

103-726. Meter Damage.

Meters will be maintained by the utility so far as ordinary wear and tear are concerned. When a meter is designed for and located within a building or structure on the premises, the customer shall pay for all damages due to external causes or heat or cold. When the meter or meter box is damaged by the customer, the customer shall pay for damages pursuant to R.103-733.5.

The customer shall notify the utility of any damage to or improper functioning of the meter as soon as the customer becomes aware of it.

HISTORY: Amended by State Register Volume 10, Issue No. 6, eff June 27, 1986; State Register Volume 14, Issue No. 3, eff March 23, 1990.

Subarticle 4

Customer Relations

103-730. Customer Information.

Each utility shall:

- A. Maintain up-to-date maps, plans, or records of its entire transmission and distribution systems, with such other information as may be necessary to enable the utility to advise prospective customers, and others entitled to the information, as to the facilities available for serving customers within its operating area.
- B. Notify each affected customer in writing as prescribed by the commission of any proposed change in rates and charges. A certification that the above notice requirements have been met shall be furnished to the commission by the utility prior to the public hearing.
- C. Provide that a complete schedule, contract forms, rules and regulations, etc., as filed with the commission and provided to the ORS, shall also be on file in the local offices of the utility and shall be open to the inspection of the public.
- D. Upon request, inform its customers as to the method of reading meters and as to billing procedures, and shall assist prospective customers in selecting the most economical rate schedule applicable.
- E. Provide adequate means (telephone, etc.) whereby each customer can contact an authorized representative of the utility at all hours in cases of emergency or unscheduled interruptions of service.
- F. Notify any customer making a complaint pursuant to 103-716 that remains unresolved after seven days, that the utility is under the jurisdiction of the commission and the customer may notify the ORS of the complaint.
- G. Inform each prospective customer from whom a deposit may be required of the provisions contained in 103-731 and its subsections.
- H. Inform each prospective customer that the customer's service line shall conform to all local plumbing codes, and in the absence of such codes shall conform to the Southern Standard Plumbing Codes.

HISTORY: Amended by State Register Volume 10, Issue No. 6, eff June 27, 1986; State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-731. Customer Deposits.

Each utility may require from any customer or from any prospective customer, a deposit intended to guarantee payment of bills for service, if any of the following conditions exist:

- (a) The customer's past payment record to a water utility shows delinquent payment practice, i.e. the customer has had two consecutive thirty-day arrears, or more than two non-consecutive thirty-day arrears in the past twenty-four months or,
- (b) A new customer cannot furnish either a letter of good credit from a reliable source or an acceptable cosigner to guarantee payment, or
- (c) A customer has no deposit, and presently is delinquent in payments (i.e., the customer has had two consecutive 30-day arrears, or more than two non-consecutive 30-day arrears, in the past 24 months), or
 - (d) A customer has had his service terminated for nonpayment or fraudulent use.

103-731.1. Amount of Deposit.

A. A maximum deposit may be required up to an amount equal to an estimated two (2) months (60 days) bill for a new customer or a maximum deposit may be required up to an amount equal to the total actual bills of the highest two (2) consecutive months based on the experience of the preceding twelve (12) months or portion of the year, if on a seasonal basis.

B. All deposits may be subject to review based on the actual experience of the customer. The amount of the deposit may be adjusted upward or downward to reflect the actual billing experience and payment habits of the customer.

103-731.2. Interest on Deposits.

A. Simple interest on deposits at the rate as determined by commission Order shall be paid by the utility to each customer required to make such deposit for the time it is held by the utility, provided that no interest need be paid unless the deposit is held longer than six months.

B. The interest shall be accrued annually and payment of such interest shall be made to the customer at least every two (2) years and at the time the deposit is returned.

C. The deposit shall cease to draw interest on the date it is returned, on the date service is terminated, or on the date notice is sent to the customer's last known address that the deposit is no longer required.

103-731.3. Deposit Records.

Each utility shall keep a record to show:

- (a) The name and address of each depositor;
- (b) The amount and date of the deposit; and,
- (c) Each transaction concerning the deposits.

103-731.4. Deposit Receipt.

Each utility shall issue a receipt of deposit to each customer from whom a deposit is received, and shall provide means whereby a depositor may establish his claim if his receipt is lost.

103-731.5. Deposit Retention.

Deposits shall be refunded completely with interest after two years unless the customer has had two consecutive 30-day arrearages, or more than two non-consecutive 30-day arrearages, in the past 24 months.

103-731.6. Unclaimed Deposits.

A record of each unclaimed deposit must be maintained for at least one year during which time the water utility shall make a reasonable effort to return the deposit. Unclaimed deposits, together with accrued interest, shall be turned over to the South Carolina State Treasurer as prescribed by law.

103-731.7. Deposit Credit.

Where a customer has been required to make a deposit, this shall not relieve the customer of the obligation to pay the service bills when due. Where such deposit has been made and service has been discontinued for reason of non-payment of bill, a utility shall apply the deposit of such customer toward the discharge of the customer's account and shall as soon thereafter as practicable refund the customer any excess of the deposit. If however, the customer whose service has been disconnected for non-payment, pays the full amount on his account within 72 hours after service has been disconnected and applies for reconnection, the utility may not charge an additional deposit except under the provisions of 1 of this rule.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 18, Issue No. 3, eff March 25, 1994; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-732. Customer Billing.

The utility shall bill each customer as promptly as possible following the reading of his meter and render a receipt of payment upon request.

103-732.1. New Service.

Meters shall be read at the initiation and termination of any service and billing shall be based thereon.

103-732.2. Customer Bill Forms.

The bill shall show:

- (a) The reading of the meter at the end and beginning of the period for which the bill is rendered;
- (b) The date on which the meter was read;
- (c) The number and kind of units metered;
- (d) The applicable rate, schedule, or identification of the applicable rate schedule. If the actual rates are not shown, the bill shall carry a statement to the effect that the applicable rate schedule will be furnished on request;
 - (e) Total amount due;
 - (f) A distinct marking to identify an estimated bill;
- (g) Any conversions from meter reading units to billing units or any calculations to determine billing units from recording or other devices, or any other factors used in determining the bill. In lieu of such information on the bill, a statement must be on the bill advising that such information can be obtained by contacting the utility's principal office;
 - (h) Number of days for which bill is rendered;
 - (i) Date payments due;

- (j) Date of bill.
- (k) Telephone number where utility can be contacted during regular office hours and non-office hours.
- (1) The telephone number and email address of the Office of Regulatory Staff.
- (m) Font size of bill must be no less than twelve (12) point.
- (n) Bill headings must be in bold font.
- (o) Full sentences in all capital letters ("all caps") is prohibited.

103-732.3. Late Payment Charges.

A maximum of one and one-half percent (1 1/2 %) may be added to any unpaid balance not paid within 25 days of the billing date to cover the cost of collection and carrying accounts in arrears. This method of late payment charge will be made in lieu of any other penalty.

103-732.4. Payment by Check.

The utility at its option for good cause may refuse to accept a check tendered as payment on a customer's account, and require payment in cash or other certified funds. Good cause must be justified by a water utility by evidencing a credit history problem or by evidencing insufficient funds of the utility customer or applicant. For the purposes of this regulation, the water utility may not consider indebtedness that was incurred by the customer or any member of his household more than six (6) years prior to the time of application.

103-732.5. Charges for Discontinuance and Reconnection.

Whenever service is turned off for violation of rules and regulations, nonpayment of bills, or fraudulent use of service, or at the request of the customer, the utility may make reasonable charges to be approved by the commission for the cost incurred in discontinuing the service and reconnection and require payment for service billed and for service used which has not previously been billed.

103-732.6. Estimated Bills.

No utility shall send a customer an estimated bill, except for good cause, when the meter could not be read or was improperly registering. In no instance will more than one estimated bill be rendered within a 60-day period, unless otherwise agreed to by the customer.

103-732.7. Deferred Payment Plan.

The utility shall provide for the arrangement of a deferred payment plan to enable a residential customer to make payment by installments where such customer is unable to pay the amount due for water service. The deferred payment plan shall require the affected customer to maintain his account current and pay not less than 1/6 of the outstanding balance for a period not to exceed six months. The outstanding balance may include the late payment charge authorized by R.103-732.3. Service to such customer shall not be terminated unless the utility has informed the customer that such deferred payment plan is available. A deferred payment plan is any agreement to extend or defer a payment cut-off date by more than 5 work days. If a Customer defaults on a Deferred Payment Plan, the Utility may terminate service pursuant to 103.735.1 (H).

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-733. Adjustments of Bills.

If it is found that a utility has directly or indirectly, by any device whatsoever, demanded, charged, collected or received from any customer a greater or lesser compensation for any service rendered or to be rendered by such utility than that prescribed in the approved rate schedules of such utility, then filed in the manner provided in Title 58 of the South Carolina Code of Laws; or if it is found that any customer has received or accepted any service from a utility for a compensation greater or lesser than that prescribed in such schedules; or if, for any reason, billing error has resulted in a greater or lesser charge than that incurred by the customer for the actual service rendered, then the method of adjustment for such overcharge or undercharge shall be as provided by the following:

103-733.1. Fast or Slow Meters.

If the overcharge or undercharge is the result of a fast or slow meter, then the method of compensation shall be as follows:

- (a) In case of a disputed account, involving the accuracy of a meter, such meter shall be tested upon request of the customer, as specified in 103-760(B).
- (b) In the event that the meter so tested is found to have an error in registration of more than three (3) per cent, the bills will be increased or decreased accordingly, but in no case shall such a correction be made for more than sixty (60) days or two (2) billing periods, whichever is greater, prior to determination of meter error.

103-733.2. Customer Inadvertently Overcharged.

If the utility has inadvertently overcharged a customer as a result of a misapplied schedule, an error in reading the meter, a skipped meter reading, or any other human or machine error, except as provided in 1 of this rule, the utility shall, at the customer's option, credit or refund the excess amount paid by that customer or credit the amount billed as provided by the following:

- (a) If the interval during which the customer was overcharged can be determined, then the utility shall credit or refund the excess amount charged during that entire interval provided that the applicable statute of limitations shall not be exceeded.
- (b) If the interval during which the customer was overcharged cannot be determined, then the utility shall credit or refund the excess amount charged during the 12-month period preceding the date when the billing error was discovered.
- (c) If the exact usage and/or demand incurred by the customer during the billing periods subject to adjustment cannot be determined, then the refund shall be based on an appropriate estimated usage and/or demand.

103-733.3. Customer Inadvertently Undercharged.

If the utility has undercharged any customer as a result of a misapplied schedule, an error in reading the meter, a skipped meter reading, or any human or machine error, except as provided in 1 and 5 of this rule, then the utility may recover the deficient amount as provided as follows:

- (a) If the interval during which a customer was undercharged can be determined, then the utility may collect the deficient amount incurred during that interval up to a maximum period of six months.
- (b) If the interval during which a customer was undercharged cannot be determined, then the utility may collect the deficient amount incurred during the six-month period preceding the date when the billing error was discovered by the utility.
- (c) The customer shall be allowed to pay the deficient amount, in equal installments added to the regular monthly bills, over the same number of billing periods which occurred during the interval the customer was subject to pay the deficient amount.
- (d) If the usage and/or demand incurred by that person during the billing periods subject to adjustment cannot be determined, then the adjustment shall be based on estimated usage and/or demand. If a meter has ceased to register, the adjustment shall be based on the average registration of the meter over a six-month period when in order.

103-733.4. Customer Willfully Overcharged.

If the utility has willfully overcharged any customer, the utility shall refund the difference, plus interest, as prescribed by the commission as stated in the South Carolina Code of Laws Legal Rate of Interest Statute. for the period of time that can be determined that the customer was overcharged.

103-733.5. Customer Undercharged Because of Fraud or Willful Misrepresentation.

If the utility has undercharged any customer because of the customer's fraudulent actions, such as tampering with, or by-passing the meter, or because the customer has willfully misrepresented a material fact resulting in an undercharge, or if it is shown that the customer is aware of fraudulent or illegal action by another person, such as tampering with, or bypassing the meter and it is evident that such tampering or bypassing benefits the customer, or if it is evident that a customer has knowledge of being undercharged without notifying the utility as such, then notwithstanding 1 of this rule, the utility shall recover the deficient amount provided as follows:

- (a) If the interval during which the customer was undercharged can be determined, then the utility shall collect the deficient amount incurred during that entire interval, provided that the applicable statute of limitations is not exceeded.
- (b) If the interval during which the customer was undercharged cannot be determined, then the utility shall collect the deficient amount incurred during the 12-month period preceding the date when the billing error was discovered by the utility.
- (c) If the usage and/or demand incurred by that customer during the billing periods subject to adjustment cannot be determined, then the adjustment shall be based on an appropriate estimated usage and/or demand.
- (d) In addition to the above, if the metering equipment has been removed or damaged, then the utility shall collect the estimated cost of repairing and/or replacing such equipment.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

- 103-734. Applications for Service.
 - A. All applications for water service may be made orally or in writing.
- B. The accepted application shall constitute a contract between the company and the applicant, obligating the applicant to pay for water service in accordance with the utility's tariff currently on file with the Public Service Commission and the ORS, and to comply with these rules and regulations.
- C. When a customer desires to have his service terminated, he must notify the utility and such notification may be orally or in writing. The utility shall be allowed a reasonable period of time after the receipt of such notice to take a final reading of the meter and to discontinue service.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-735. Denial or Discontinuance of Service.

Service may be refused or discontinued for any of the reasons listed below. Unless otherwise stated, the customer shall be allowed a reasonable time in which to comply with the rule before service is discontinued.

- A. Without notice in the event of a condition determined by the utility, the commission by Order, or the Department of Health and Environmental Control to be hazardous or dangerous.
- B. Without notice in the event of customer use of equipment or service in such a manner as to affect adversely the utility's service to others.
 - C. Without notice in the event of unauthorized use of the utility's service.
- D. For customer tampering with equipment furnished and owned by the utility. The customer shall make every reasonable effort to prevent tampering, and shall notify the utility immediately of any tampering with, damage to, or removal of any equipment.
- E. For violation of and/or non-compliance with the commission's regulations governing service supplied by the utility.
- F. For failure of the customer to fulfill his contractual obligations for service and/or facilities subject to regulation by the commission.
 - G. For failure of the customer to permit the utility reasonable access to its equipment.
 - H. For failure of the customer to provide the utility with a deposit as authorized by 103-731.
- I. For failure of the customer to furnish permits, certificates, and rights-of-way as necessary to obtaining service, or in the event such permissions are withdrawn or terminated.
 - J. For illegal willful misuse of utility's service by the customer.

- K. For failure of the customer to comply with reasonable restrictions on the use of water, as imposed under 103-772 provided that notice has been given to the customer and that written notice has been furnished to the ORS.
- L. No water utility shall be required to furnish its water service or to continue its service to any applicant who, at the time of such application, is indebted or any member of his household is indebted, under an undisputed bill to such water utility for water service previously furnished such applicant or furnished any other member of the applicant's household. However, for the purposes of this regulation, the water utility may not consider any indebtedness which was incurred by the applicant or any member of his household more than six (6) years prior to the time of application.
- M. The utility may discontinue a customer's service should that customer be in arrears on an account for service at another premise, unless the customer pays a reasonable amount of his arrears account and makes reasonable arrangements with the utility to amortize the balance of such past-due account over a reasonable length of time, not to exceed 12 months.
- N. The customer's use of the utility's service conflicts with, or violates order, ordinances or laws of the State, or any subdivision thereof or the commission.

HISTORY: Amended by State Register Volume 10, Issue No. 6, eff June 27, 1986; State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 18, Issue No. 3, eff March 25, 1994; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-735.1. Procedures for Termination of Service.

- (A) Service may be terminated for non-payment of a bill, provided that the water utility has made a reasonable attempt to effect collection and has given the customer written notice, sent by regular mail to the customer's billing address, that he has ten days in which to make settlement on his account or have his service disconnected. Service will be terminated only on Monday through Thursday between the hours of 8:00 A.M. and 4:00 P.M., unless provisions have been made to have someone available to accept payment and reconnect service.
- (B) Service may be terminated for non-payment of any connection charge properly imposed by the utility and owed by the customer provided that the utility has made a reasonable attempt to effect collection and has given the customer 30 days written notice, sent by certified mail to the customer's billing address, with a copy forwarded to the ORS. A connection charge owed by a third party or a previous occupant or owner of premises is not deemed to be owed by the current customer, and that current customer's service may not be disconnected under such circumstances. At the expiration of the 30 day period, the utility shall post a second notice by certified mail to the customer advising that in not less than 10 days nor more than 30 days, his service may be disconnected at any time without further notice. The utility must inform the customer in the notice that the customer can contact the ORS if the customer disputes the discontinuance of service.

(C)Not more than two business days prior to termination of service, the water utility shall make reasonable efforts either by telephone or in person to contact the customers that are subject to termination of service to notify him or her that his or her service is subject to termination for non-payment; a door hanger providing such termination notice left at the customer's residence shall constitute "reasonable efforts." Alternatively, not more than three business days prior to termination of service, the water utility shall notify the customer by mail that he or she is subject to termination of service for non-payment. The

water utility shall maintain records of the efforts made to contact such customers. Termination of service may be delayed in case of inclement weather, emergencies or operational conflicts.

(D) The water utility shall provide a copy of the termination notice to any third party identified by the customer upon establishment of the service account or at any time thereafter.

HISTORY: Added by State Register Volume 18, Issue No. 3, eff March 25, 1994; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-736. Insufficient Reasons for Denying Service.

The following shall not constitute cause for refusal of service to a present or prospective customer:

- A. Non-payment for service by a previous occupant of the premises to be served, unless such previous occupant shall benefit from such new service.
 - B. Failure to pay for merchandise purchased from the utility.
 - C. Failure to pay for a different type or class of public utility service.
 - D. Failure to pay the bill of another customer as guarantor thereof.

HISTORY: Amended by State Register Volume 18, Issue No. 3, eff March 25, 1994.

103-737. Right of Access.

- 1. The authorized agents of the utility shall have the right of access to the premises supplied with water, at reasonable hours, for the purpose of maintenance and reading of meters, examining fixtures, protective device and pipes, observing the manner of using water, and for any other purpose which is proper and necessary in the conduct of the utility's business.
- 2. When a water line which is property of a utility is on the property of a resident in the utilities' service area which is on file with the ORS, the resident shall provide reasonable access to the utility for the maintenance thereof. Any damage done to the property by the utility shall be corrected by the restoration of comparable grass, shrubbery and trees from nursery stock to conform the condition before the maintenance process began.

HISTORY: Amended by State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-738. Customer Complaints.

A. Complaints concerning the charges, practices, facilities, or service of the utility shall be investigated promptly and thoroughly. The utility shall keep records of customer complaints as will enable it and the

ORS to review and analyze its procedures and actions. All customer complaints shall be processed by the utility pursuant to 103-716 and 103-730.F.

B. When the ORS has notified the utility that an oral complaint has been received concerning a specific account and the ORS has received notice of the complaint before service is terminated, the utility shall not discontinue the service of that account until the ORS's investigation is completed and the results have been received by the utility. Service shall not be discontinued if the complainant requests in writing a hearing before the commission.

HISTORY: Amended by State Register Volume 10, Issue No. 6, eff June 27, 1986; State Register Volume 14, Issue No. 3, eff March 23, 1990; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-739. Tariffs, Rules and Regulations.

A copy of the utility's tariffs as filed with the commission and provided to the ORS shall be on file in the local business offices of the utility and shall be available for public inspection.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-740. System Which Utility Must Maintain.

Each utility, unless specifically relieved in any case by the commission from such obligation, shall operate and maintain in safe, efficient and proper conditions all of its facilities and equipment used in connection with the services it provides to any customer up to and including the point of delivery into systems or facilities owned by the customer.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-741. Replacement of Meters.

Whenever a consumer requests the replacement of a service meter on his premises, such request shall be treated as a request for the test on such meter, and as such shall fall under the provisions of 103-760(B).

103-742. Waste of Water.

The customer should maintain his service pipe and all piping and fixtures on or in the building so that any loss of water through leakage is kept to a reasonably small amount. If the leakage becomes excessive, then it may be treated as a willful waste of water. Unnecessary or excessive use of water may be treated as a willful waste of water.

103-743. Contracts.

No utility shall execute or enter into any agreement or contract with any person, firm, partnership, or corporation or any agency of the Federal, state, or local government which would impact, pertain to, or effect said utility's fitness, willingness, or ability to provide water service, including but not limited to the

treatment of said water, without first submitting said contract in form to the commission and the ORS and obtaining approval of the commission.

HISTORY: Added by State Register Volume 10, Issue No. 6, eff June 27, 1986; State Register Volume 31, Issue No. 5, eff May 25, 2007.

Subarticle 5

Engineering

103-750. Requirement for Good Engineering Practice.

A. The water plant of the utility shall be constructed, installed, maintained and operated in accordance with accepted good engineering practice and regulations included to assure as far as reasonably possible, continuity of service, uniformity in the quality of service furnished, and the safety of persons and property.

The design and construction of the water plant shall conform to the requirements of the South Carolina Department of Health and Environmental Control.

B. Disinfection of facilities. All new mains, pumps, tanks, wells and other facilities for handling potable water, repaired mains and other facilities, shall be thoroughly disinfected before being connected to the system. The method of disinfection shall be as approved by the Department of Health and Environmental Control.

1. Mains.

- A. Depth of Mains. Water mains should be installed below the frost line or be otherwise protected to minimize the possibility of freezing and shall not have less than 30 inches cover except where it is necessary to avoid underground obstruction or rocky or hardpan conditions where such depth is not feasible, provided such deviation is approved by the Department of Health and Environmental Control.
- B. Dead Ends. The utility should design its distribution system so as to avoid dead ends in mains. Where dead ends cannot be avoided the mains shall be flushed as often as necessary to maintain the proper quality of the water. Any dead end which is longer than 200 feet must have a blowoff valve at end of line.
- C. Segmentation of System. Valves shall be provided at reasonable intervals in distribution mains so that in case of breaks or repairs a minimum number of customers will be affected. When feasible, valves shall be provided at intersections of mains and in the mains at intervals not to exceed one continuous block or 500 feet, whichever is greater, except where a dead end run is not intended to serve any intervening customers.
- D. Grid Systems. The distribution system should be laid out in a properly segmented grid so that in case of breaks or repairs a minimum number of customers will be affected.
- E. Minimum Pipe Sizes. This distribution system shall be of adequate size and designed to maintain the pressures within the range required by 103-774. The pipe used in the system should be at least 4 inches in size. In special cases, pipes of the sizes listed below may be installed. However, the maximum length from any connecting main at least 4 inches in size should not exceed the following:

_	1-inch	150 feet
-	11/2-ineh	300 feet
	2-inch	1500 feet

103-751. Acceptable Standards.

Unless otherwise specified by the commission, each utility shall use the guideline of the Department of Health and Environmental Control as minimum standards of good engineering practices.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-752. Acceptable References.

Unless otherwise specified by the commission, the utility shall use the applicable provisions in the publications listed below as operational requirements, where applicable, and standards of accepted good practice=:

- (a) The most current edition of the Community Water Systems, Ameen; and
- (b) The most current edition of the Manual of Individual Water Systems.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-753. Adequacy of Service.

The source of supply and transmission facilities, and/or production and/or storage capacity of the utility's plant, must be sufficiently large to meet all reasonably expectable demands for service.

103-754. Inspection of Utility Plant.

Each utility must adopt a program of inspection of its plant in order to determine the necessity for replacement and repair. The frequency of the various inspections shall be based on the utility's experience and accepted good practice.

103-755. Temporary Service.

When the utility renders temporary service to a customer, it may require that the customer bear all the cost of installing and removing the service in excess of any salvage realized.

103-756. Engineering Analysis.

A. The ORS or its authorized representatives may survey anticipated extensions of water line and the utility will assist in such survey and provide all pertinent data necessary to determine cost and feasibility of extending such lines.

- B. The utility shall assist in the verification of tests of water meters made by ORS or its authorized representative.
- C. The utility shall provide the ORS and its representatives access to all utility property when the ORS undertakes to verify inventories of utility plant systems, or obtain other necessary information.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

Subarticle 6

Inspection and Tests

103-760. Utility Inspections and Tests.

- A. Each utility shall, unless specifically excused by the commission, provide such laboratory, metertesting equipment and other equipment and facilities as may be necessary to make the tests required of it by these rules or other orders of the commission. The apparatus and equipment so provided shall be subject to the approval of the commission, and it shall be available at all times for the inspection of any member or authorized representative of the ORS.
- B. Upon request by a customer and at no charge, the utility shall make a test of the meter serving him, provided that such tests need not be made more frequently than once in 24 months.
 - 1) The customer, or his representative, may be present when his meter is tested.
- 2) A report of the results of the test shall be made to the customer within a reasonable time after the completion of the test, and a record of the report, together with a complete record of each test, shall be kept on file at the office of the utility.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-761. Commission ORS Inspection and Tests.

The ORS shall make tests of meters as follows:

- (a) Upon written application to the ORS by a customer or a utility, a test will be made of the customer's meter as soon as practicable.
- (b) On receipt of such request the ORS will notify the utility and the utility shall not knowingly remove or adjust the meter until instructed by the ORS. The utility shall furnish to the ORS's representative such reasonable assistance as may be required to make the test.
 - (c) The customer, or his representatives, may be present when his meter is tested.
 - (d) The ORS will make a written report of the results of the test to the customer and to the utility.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-762. Test Procedures and Accuracies.

Method of Testing. All tests to determine the accuracy of registration of any water service meter shall be made with a suitable meter prover, and records of all regular or complaint tests shall be kept in the files of the utility.

103-763. Facilities and Equipment for Testing.

Each utility shall maintain or designate a meter shop for the purpose of inspecting, testing and repairing meters. The shop shall be open for inspection by authorized representatives of the ORS at all reasonable times, and the facilities and equipment, as well as the methods of measurement and testing employed, shall be subject to the approval of the commission. The accuracy of the test equipment and test procedures shall be such that the overall error will not exceed .03%.

- 1. Working Standards.
- A. Each meter shop maintained or designated by a utility shall have at least one calibrated tank available for volumetric measurement or a tank mounted upon scales for weight measurement. The tank shall be of sufficient capacity to insure an acceptable determination of the accuracy of the utility's meters.
- B. The utility may use a portable test meter, approved by the commission for use as a standard, for the purpose of testing meters.
- C. Reasonable care must be exercised in the use and handling of standards to assure that their accuracy is not disturbed. Each standard shall be accompanied at all times by a certificate or calibration card, duly signed and dated, on which are recorded the corrections required to compensate for errors found at the customary test points at the time of the last previous test.
- 2. Meter Prover. The accuracy of all provers and methods of operating them will be established from time to time by a representative of the ORS. All alterations, accidents, or repairs which might affect the accuracy of any meter prover or the method of operating it shall be promptly reported in writing to the ORS.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

Subarticle 7

Standards and Quality of Service

103-770. Quality of Service.

A. Each utility shall provide water that is potable and, insofar as practicable, free from objectionable odor, taste, color and turbidity. Each utility must have a permit as required by the health laws of the State of South Carolina, and shall comply with all laws and regulations of State and local agencies pertaining to water service.

B. Water Supply.

- 1) The source of supply shall be:
 - (a) Free from pollution, unless the water is subsequently purified by treatment.
 - (b) Adequate to provide a continuous supply of water.
- (c) Of such quality as to meet the standards of the South Carolina Department of Health and Environmental Control.
 - 2) Operation of supply system.
- (a) The water supply system, including wells, reservoirs, pumping equipment, treatment and filtration works, mains, meters, and service pipes shall be free from sanitary defects.
- (b) Any physical connection between the distribution system of a public water supply and that of any other water supply must comply with the regulations of the South Carolina Department of Health and Environmental Control.
- C. Testing of Water. Each utility shall have representative samples of the water supplied by it examined by the responsible State or local agencies, or by an approved water laboratory, at intervals specified by those agencies in accordance with the standards of the South Carolina Department of Health and Environmental Control.

103-771. Interruptions of Service.

- A. Each utility shall make reasonable efforts to avoid interruptions of service, but when interruptions occur, service shall be re-established within the shortest time practicable, consistent with considerations of safety.
- B. Scheduled interruptions shall be made at a time that will not cause unreasonable inconvenience to customers and shall be preceded by adequate notice to those who will be affected.
- C. Each utility shall maintain records and notify the commission and the ORS of any interruption in its service in accordance with 103-714.
- D. If an interruption affects the service of any public fire protection system, the utility shall immediately notify the public official responsible for fire protection.
- E. When the system pressure is provided through mechanical means, emergency standby pumping equipment or other adequate facilities shall be available to maintain pressure in the mains in the event of failure of the primary pumping facilities.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-772. Restrictions of the Use of Service.

- A. The utility may impose reasonable restrictions on the outdoor use of water during period of shortage of supply, excessive demand or other difficulty which jeopardizes the supply of water to any group of customers.
- B. The utility may impose reasonable restrictions on the use of water by customers who use large quantities of water and thereby create conditions which prevent the company from supplying satisfactory service to that customer, or to other customers.
- C. If a utility finds that it is necessary to restrict the use of water, it shall notify the customers, and give the commission and ORS written notice before such restriction becomes effective, except in the event of an emergency, when such notification may be made by telephone. Such notifications shall specify:
 - 1) The reason for the restriction.
- 2) The nature and extent of the restriction, (e.g., on outdoor use of water, use by certain classes of customers, etc.).
 - 3) The date such restriction is to go into effect.
 - 4) The probable date of termination of such restriction.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-773. Pressure Tests.

- A. Each utility having more than 100 customers must have at least one portable recording pressure gauge available.
- B. Pressure measurements should be made at the customer's meter, or if no meter, customer's curb stop. If no outlet is available at this point, then the measurement may be made at the nearest available outlet, making due allowance for any pressure differential between the point of measurement.
- C. Each utility shall make a sufficient number of pressure measurements in order to determine if pressures throughout the system are in compliance with the requirements of 103-774.
- D. Each utility shall keep records of each test of pressures. These records shall include, as a minimum, the date, time, and location where the test was conducted. Pressure records shall be retained by the utility for at least two years and shall be made available for inspection by the ORS at all reasonable times.

HISTORY: Amended by State Register Volume 10, Issue No. 6, eff June 27, 1986; State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-774. Pressure Limits.

- A. Under normal conditions of use of water, the pressure at a customer's service connection shall be:
 - 1) Not less than 25 psig; and,

- 2) Not more than 125 psig.
- B. Pressure outside the limits specified will not be considered a violation when the variations:
 - 1) Result from the action of the elements.
 - 2) Consist of infrequent fluctuations not exceeding five minutes' duration.
 - 3) Arise from service interruptions.
 - 4) Result from causes beyond the control of the utility.
- 5) Result from variations in service elevations which are local and which can be controlled in a satisfactory manner.

Subarticle 8

Safety

103-780. Acceptable Standards.

As criteria of accepted good safety practice the commission will use the applicable provisions of the standards referred to in 103-751.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-781. Protective Measures.

- A. Each utility shall exercise reasonable care to reduce the hazards to which its employees, its customers, and the general public may be subjected.
- B. The utility shall give reasonable assistance to the ORS in the investigation of the cause of accidents and shall give reasonable assistance to the commission and the ORS in the determination of suitable means of accident prevention.
 - C. Each utility shall maintain a summary of all reported accidents arising from its operations.

HISTORY: Amended by State Register Volume 31, Issue No. 5, eff May 25, 2007.

103-782. Safety Program.

Each utility shall devise and implement a safety program, adapted to the size and type of its operations. At a minimum, the safety program should:

(a) Require the employees to use suitable tools and equipment in order that they may perform their work in a safe manner.

- (b) Instruct employees in safe methods of performing their work.
- (c) Instruct employees who, in the course of their work, are subject to the hazard of electrical shock, asphyxiation or drowning, in accepted methods of artificial respiration.